

# **ENERGY EFFICIENCY WORKING GROUP (EEWG) CY 03 ANNUAL REPORT TO THE DIRECTORS**

**DECEMBER 30, 2003**

## **PURPOSE**

EEWG is a working committee of energy management professionals from various DOE/HQ, field, operations and support offices, national laboratories and M&O contractors throughout the DOE complex.

Our goal is to promote excellence in energy management through the active exchange of management and technical information, timely and effective communication, and facilitate the application of information and techniques.

Key vehicles we use to further this goal are periodic working meetings. We normally conduct working meetings twice a year, lasting 1-2 days each. We encourage DOE/HQ and local DOE office attendance at each working group meeting. We do not require EFCOG membership to attend our working meetings. Interested energy management professionals from other federal agencies and organizations are welcome and encouraged to participate. There is no fee for working meeting participants. Working meetings are normally scheduled to coincide with other energy related conferences and technical seminars. This strategy leverages the limited travel budgets of members and participants.

## **MEMBERSHIP**

Primary sponsor:

DOE's Federal Energy Management Program (FEMP)  
Elizabeth Shearer, FEMP Director  
Vic Petrolati, DOE's Energy Management Team Leader

Executive Sponsor: Don Pearman, Bechtel SAIC

EEWG Chair: Mike Moran, PNNL (mid year change from Mike Holda to Mike Moran)

EEWG Steering Committee:

Cheryl O'Brien, INEEL  
Mike Holda, LBNL  
James Hedin, WIPP  
Wilson Reynolds, Energy Management Engineering  
Carter Ward, Energy Information Systems  
Vic Petrolati, DOE's Energy Management Team Leader  
Mike Moran, PNNL  
Tom Brand, DOE/OAK  
Dale Sartor, LBNL  
Ernie Fossum, INEEL  
Blair Horst, LLNL  
Otto Van Geet, NREL

Over 50 members and regular participants representing national laboratories, M&O contractors, energy management firms, DOE/HQ, field, operations and support offices.

## **STATUS**

Over the past year the primary focus of the working group has been on issues associated with the development and implementation of sustainable and energy efficient design and best practices at DOE facilities.

Some of the goals of the working group have been to support DOE/HQ and site energy coordinators:

1. Increase the number of DOE sites that participate in departmental energy management program funding initiatives and have active energy management programs.
2. Continue implementation of DOE Order 430.2a including:
  - a) Implementing water efficiency programs, plans and best management practices
  - b) Selection of DOE/EPA energy star products
  - c) Strategies for reducing energy consumption in Laboratory and Industrial Facilities
  - d) Increased use of off-grid generation systems including renewable energy Systems
3. Develop and/or work to establish Best Management Practices through the Departmental Model Programs initiative including:
  - a) Recommissioning (for both new and current facilities);
  - b) Sustainable Design for new facilities;
  - c) Acquiring Energy Star Labels for DOE Office Buildings;
  - d) Expanding the use of private sector financing for DOE Facilities;
  - e) Water Management Plans and accomplishment of best practices;
  - f) Expanding the purchase of Energy Star Products; and
  - g) Replacing chillers using ozone depleting substances.

These model programs provided a springboard for the introduction of best practices in energy management at DOE facilities. Presentations of the progress and results of these model programs at DOE sites were included at the February and August 2003 EEWG meetings.

4. Integrate EEWG with other EFCOG Working Groups. The Chairs of the EFCOG Maintenance, Engineering Standards and ISM Environmental subgroup shared

information with us on WG related activities/initiatives at our February 2003 EEWG meeting. Mike Holda, EEWG Chair gave a presentation at Maintenance and Engineering Practices meetings in CY2003. The intent was to exchange information, share common goals, and leverage synergies between the working groups and their members

DOE continues to experience an accelerating loss of talented energy efficiency professionals at sites and operations offices due to limited direct appropriations.

Summary of other Energy Efficiency Working Group (EEWG) activities during CY2003:

EEWG meeting February 5-6, 2003 held at NREL, Co. Agenda included Leadership in Energy and Environmental Design (LEED) Green Building rating system and it's application at DOE sites, status update on DOE Order 430.2, FEMP/HQ update, best practices on water efficiency, Energy Star product selection, UESC update from DOE HQ, and a discussion on coordination of DOE/HQ program infrastructure budgets with DOE site energy managers. The meeting summary is posted on the EFCOG/EEWG website.

EEWG meeting August 21, 2003 held in conjunction with Energy 2003 Conference. The meeting attendance fell below expectations. Agenda included Federal Energy Management Program HQ/Update, overview of NREL's 25-year site plan, representatives from EERE technical groups presentations on initiatives, technology demonstrations and areas of collaboration, ANL LEED information, BNL's Energy Management Plan.

Mike Holda, EEWG Chair, provided excellent leadership for the EEWG for more than ten years. Mike decided to step down as Chair this year, but will remain active with the EEWG as a member of the Steering Committee. He is admired and respected by his peers and will be missed as the group leader. Mike Moran, PNNL, was nominated for and accepted the EEWG Chair position at the August meeting.

One subgroup was formed in CY03 (EEWG Sustainable Design Interest Group) and will continue in CY04 focusing on:

- selection of topics and speakers to present at EEWG meetings
- review Sustainable Design "Best Practices" for DOE facilities
- suggestions to revisions of DOE 430.2a.

Meeting agenda, notes, presentations and attendees are posted on the EEWG/EFCOG website.

We are also utilizing the EFCOG/EEWG website to post applicable DOE directives, publications, working group meeting information, and energy related conferences and technical seminars.

## **CY2004 PLANS**

Our next EFCOG/EEWG meeting is scheduled for February 4-5, 2004 at the Pacific Northwest National Laboratory (PNNL) in Richland, Wa. The meeting will be held (tentatively) in conjunction with a Sustainable Design Training session. The focus of the training will be on existing facilities to include sustainable design into retrofitting projects

and for new construction.

EEWG meeting discussion topics will include:

1. Presentations by related EFCOG Working Groups including Maintenance, Engineering Standards, and ISM Environmental Subgroup
2. LBNL will share experiences of certifying the new Molecular Foundry building
3. DOE FEMP/HQ update
4. Utility Energy Services Contracts update
5. PNNL's Site Energy Management Program
6. DOE Order 430.2a site implementation progress update: noteworthy accomplishments required by order including:
  - a) Water efficiency programs, plans and best management practices
  - b) DOE/EPA energy star product selection
  - c) Laboratory/Industrial Facilities Energy reduction strategies
  - d) Increased use of off-grid generation/renewables
7. Roundtable discussion- success stories, issues, lessons learned

We also plan to have an EEWG meeting in August 2004 in conjunction with Energy 2004 in Rochester, NY. The day and agenda for the meeting has not yet been developed.

In addition to the meetings mentioned above, the group will hold teleconferences during May and November 2004.

Travel restrictions are expected to continue to impact participation in working meetings. An attempt to video conference/tape future working meetings will be used when practical.

In CY 2004 we will continue to assist DOE FEMP with marketing and implementation of alternative financing mechanisms for energy efficiency and infrastructure improvements projects at DOE sites.

We will continue to interact with representatives from other EFCOG Working Groups exchange information, share common goals, and to take advantage of synergies between the working groups and their members

EEWG will also continue to take a comprehensive customer focused approach responsive to FEMP's vision to assist DOE and federal agency sites increase energy efficiency, conserve water, promote renewable energy technology use and manage energy costs.

EEWG will continue to assist DOE's Federal Energy Management Program with timely and effective communication between sites, field and operations offices and HQ.

We will also continue to increase communication and participation of energy

management professionals from DOE, other federal agencies and other appropriate EFCOG working groups at workshops to extend the pool of knowledge available to support DOE's energy management initiatives.

In CY 04 we will work with DOE's Office of Energy Efficiency and Renewable Energy (EERE) to explore the potential of increasing the scope of EEWG to include applicable EERE technology initiatives.

### **RECOMMENDATIONS**

Recommend that the Energy Efficiency Working Group (EEWG) be continued.